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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/763,678	06/04/2001	Henry Guy Stevens		9281

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EXAMINER	
REDDICK, MARIE L	

ART UNIT	PAPER NUMBER
1713	

DATE MAILED: 07/01/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/763,678	STEVENS, HENRY GUY	
	Examiner	Art Unit	
	Judy M. Reddick	1713	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *03/31/03;02/20/04;04/14/04*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *94-116* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *94-116* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *03/31/03*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Information Disclosure Statement

1. The information disclosure statement filed on 03/31/03 has been considered and scanned into the application file.

DETAILED ACTION

Response to Amendment

2. Applicant's amendment coupled with the persuasive arguments filed, 02/20/04 & 04/14/04, have been fully considered and are sufficient to remove the rejections based on Gerontopoulos et al, Weyand, Redd et al, Loomis et al and Giltsoff.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 94-116 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

A) The recited contents governing the "PVA", "plasticizer", "internal lubricant" and "external lubricant" per claim 94, "filler" per claim 102, "PVA", "filler", "plasticizer" and "internal lubricant" per claim 104, "PVA", "filler", "plasticizer", "internal lubricant" and "external lubricant" per claim 105, "PVA", "stearate-coated calcium carbonate", "glycerol", "octadecanamide" and "zinc stearate" per claim 108 and "moisture content" per claim 110 constitute indefinite subject matter as per the exact entity that the contents are being based on is not readily ascertainable, i.e., "the polymer feedstock", "blend" or else.

B) The recited "low molecular weight" per claim 97 constitutes indefinite subject matter as per the metes and bounds of "low" engender indeterminacy in scope, "low" being relative and not absolute.

C) The recited "substantially without melting" per claim 109 constitutes indefinite subject matter as per the metes and bounds of "substantially" engenders indeterminacy in scope. The term "substantially" is not defined by the claims and the specification does not provide a standard for ascertaining the requisite degree and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. The factual inquiries set forth in Graham v. John Deere Co., 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

6. Claims 94-110 and 116 are rejected under 35 U.S.C. 103(a) as being unpatentable over IE 970280 in combination with applicant's own disclosure.

IE'280 discloses and exemplifies biodegradable plastic materials and method of manufacturing biodegradable materials via mixing, in a blender or other conventional polymer mixing apparatus at temperatures of at least 55 degrees C, a polyvinyl alcohol polymer or a polyvinyl alcohol/polyvinyl acetate copolymer with a plasticizer or blend of plasticizers and a stabilizer or blend of stabilizers at a temperature in the range of between 106 and 140 degrees C. More specifically, IE'280 teach polymer feedstocks, in the form of pellets which appear to be cold-pressed, defined basically as containing an

extrudable blend of of a polyvinyl alcohol polymer(94 & 104) or a polyvinyl alcohol/polyvinyl acetate copolymer, 2 to 30 % by weight a plasticizer or blend of plasticizers which includes glycerol, ethylene glycol, any vegetable-based oils such as soya or corn oil(sufficient to meet the filler material) and combinations thereof(94 & 104), 2 to 6 % by weight of a stabilizer or blend of stabilizers which includes a stearic acid metal salt and/ or stearamide, sufficient to meet the internal and external lubricant(94 and 104). See the Abstract, page 1, lines 2-5, page 2, lines 19-31, pages 3-8, Runs 5-11B, especially Runs 11A & 11B, page 17, lines 25-30, page 18, page 19 and the claims.

The disclosure of IE'280 differs basically from the claimed invention as per the non-express disclosure of an embodiment directed to the specifically defined polymer feedstock, as claimed. However, one having ordinary skill in the art would have found it obvious, on its face, to extrapolate the precisely defined polymer feedstock from IE'280 as per such having been within the purview of the general disclosure of IE'280 and with a reasonable expectation of success. Specifically, one having ordinary skill in the art would have found it obvious to swap the triacetin(11A) and the "Dioctyl adipate(11B) for the vegetable oil, based on their identified scope equivalency, as well as make minor adjustments to the component contents and with a reasonable expectation of equivalent results. Criticality for such, commensurate in scope with the claims, not having been demonstrated on this record.

As to the specific filler materials per claims 98-101 & 108, it would have been within the purview of the skilled artisan to add any conventionally known filler material(inorganic) to the exemplified recipe blend of IE'280 and with a reasonable expectation of obtaining the cumulative additive effect. Furthermore, as to the organic filler material(99), it would have been obvious to the skilled artisan to add a superabsorbent material, admitted by applicant to be known and suitable for use as the filler in embodiments of the invention(page 6, lines 24-31, page 7, lines 1-31 and page 8, line 1) to the exemplified recipe blend of IE'280 and with a reasonable expectation of success. Moreover, the

combination of the specifically recited inorganic and organic filler material, following the antecedently recited rationale, would have been obvious to the skilled artisan and with a reasonable expectation of success. Furthermore, the interchangeability of one well-known metal stearate for another is a matter of ordinary choice to the skilled artisan and with a reasonable expectation of success, absent some unusual or unexpected evidence(108).

As to any remaining dependent claim limitations, if not taught or suggested by IE'280, these limitations would have been obvious to the skilled artisan and with a reasonable expectation of success, i.e., any additional or particular claim parameters which may not be specifically set out in the references are considered to be inherent in the reference products(moisture content) or not to involve anything unobvious absent a showing to the contrary.

Response to Arguments

7. Applicant's arguments filed 02/20/04 have been fully considered but they are not persuasive.

As to the 112, 2nd paragraph issues----While Counsel, in a good faith effort, attempted to remedy the 112, 2nd paragraph issues raised in a previous Office Action(09/30/02), some issues remain and new issues were created and are as set forth supra.

As to IE 970280----Counsel has not discussed this reference nor explained how the instant claims avoid the reference or distinguish from it.

A future rejection under the judicially created doctrine of obviousness-type double patenting over the claims of U.S. copending application 10/220,491(28-39), U.S. copending application 10/407,796(1-19) and U.S. Patent 6,544,452(1-13) can be precluded by the filing of a proper terminal disclaimer. A rejection, at this time, is not being made since the outstanding rejections still appear to be valid.

Conclusion

8. The prior art to Marten et al(U.S. 5,051,222), Marten et al(U.S. 5,137,969) and Centofanti et al(U.S. 6,103,823), listed on the attached FORM PTO 892, is cited as of interest in teaching extrudable polyvinyl alcohol compositions and is considered cumulative to the prior art supra.

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, THIS ACTION IS MADE FINAL. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Judy M. Reddick whose telephone number is (571)272-1110. The examiner can normally be reached on Monday-Friday, 6:30 a.m.-3:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu can be reached on (571)272-1114. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Judy M. Reddick
Primary Examiner
Art Unit 1713

JMR
06/26/04